

REMARKS

Claims 21-39 and 43-44, as amended, and new claims 45-46 are pending in this application. In this Response, Applicants have amended certain claims. In light of the Office Action, Applicants believe these amendments serve a useful clarification purpose, independent of patentability. Accordingly, Applicants respectfully submit that the claim amendments do not limit the range of any permissible equivalents.

In particular, claims 21, 31, and 39 have been amended to further clarify the invention. For example, claims 21 and 31 have been rewritten to further define the components of the polymer blend. Claim 39 has been amended to include the features of now canceled claim 42. As such, claims 40-42 have been canceled. In addition, claim 22 has been amended to maintain consistency with the language of rewritten claim 21. Finally, claims 45-46 have been added to recite additional embodiments of the invention, which are supported by the present Specification. *See, e.g.*, Specification at Page 17, lines 21-31 and Page 6, lines 23-27. As no new matter has been added by the amendments herein, Applicants respectfully request entry of these amendments at this time.

Filing Date

Applicants have amended the priority claim to further clarify that the present application is a continuation of application no. 09/608, 566, now U.S. Patent No. 6,391,955 (issued May 21, 2002), which is a continuation-in-part of two applications: 09/215,370 and 09/225,341. The rewritten priority claim is believed to address the Examiner's concerns regarding copendency of the parent application.

REJECTIONS UNDER 35 U.S.C. § 112

Claims 21-44 were rejected under 35 U.S.C. § 112, first paragraph, for the reasons set forth on page 2 of the Office Action. With regard to the Examiner's concerns regarding claim 31, as provided in the Preliminary Amendment, U.S. Patent No. 6,084,016 (one of the parents of application no. 09/608,566) describes the claimed E/X/Y structure recited therein. *See* 6,084,016 at Col. 6, lines 48-57. In addition, the present Specification teaches that conventional ionomers, which are defined to include the SURLYN® and IOTEK® ionomers discussed in the '016 patent, may be used in a blend with oxa esters. *See* Specification at Page 15, lines 14-21, Page 16, line 34 to Page 17, line 6, and Page 17, line 32 to Page 18, line 8.

Because the entire disclosure of the '016 patent was incorporated by reference into 09/608,566, which the present application claims priority to, Applicants respectfully submit that

the subject matter of claim 31 is supported by the present Specification. The incorporation by reference reasonably conveys to one skilled in the relevant art that the inventors had possession of the claimed invention at the time of invention. See MPEP § 608.01(p)(1)(A) (discussing that “[a]n application for a patent when filed may incorporate ‘essential material’ by reference to a U.S. Patent”).

With regard to the flexural modulus limitation of claims 21 and 39, Applicants respectfully submit that the rejections based thereon are moot in light of the amendments herein. Specifically, claims 21 and 39 has been rewritten to more clearly define the ionomeric component and thermoplastic component, respectively. Because of these amendments, claims 21 and 39 no longer contain the flexural modulus requirement of concern to the Examiner.

For the reasons above, Applicants respectfully request that the § 112 rejections be reconsidered and withdrawn.

REJECTIONS UNDER 35 U.S.C. §§ 102 and 103

The Rejection Based upon WO 96/40826

Claims 21-22, 24, 39, and 43 were rejected under 35 U.S. C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over the WO 96/40826 patent for the reasons set forth on page 3 of the Office Action. Because the independent claims included in the rejection have been rewritten without the oxa acid previously recited therein, the polymer blends of the present invention now include at least one ionomer and at least one oxa ester (claim 21), at least one acid-containing ionomeric component and at least one oxa ester (claim 31), or at least one saponified ionomer and at least one oxa ester (claim 39). Applicants respectfully submit that the WO 96/40826 patent does not disclose or suggest the presently recited oxa ester / ionomers blends (claims 21) or oxa esters / saponified ionomers blends (claim 39).

In particular, WO 96/40826 generally discloses golf ball covers with a first comonomer of oxa acid and a second comonomer of polyurethane, epoxy resin, polyethylene, polyamide, polyester, or ionomer. See Abstract. WO 96/40826 is silent as to the use of oxa esters in a blend with an ionomer or saponified ionomer, as now recited in independent claims 21, 31, and 39.

As such, one of ordinary skill in the art would have lacked the motivation to modify the oxa acid blends of the WO 96/40826 patent to arrive at the present invention without the present invention to use as a template. Thus, Applicants respectfully request that the Examiner reconsider and withdrawal the rejection based on WO 96/40826.

The Rejection based on WO 96/40826 in view of WO 96/40377 or Sullivan '553

In addition, claims 21-22, 24-27, 39, and 43 were rejected under § 103(a) as obvious over the WO 96/40826 patent in view of WO 96/40377 or U.S. Patent 5,833,553 to Sullivan. Because WO 96/40826 does not even suggest density-adjusting fillers for inclusion in the disclosed oxa acid cover composition, the Examiner cited the WO 96/40377 patent and Sullivan '553 for their respective disclosures of various fillers. In light of the stated deficiencies of the WO 96/40826 patent as discussed above, however, these secondary references would also have to include teachings regarding the inclusion of oxa esters in layer blends to render obvious the present invention. Neither reference even suggests the oxa ester blends of the present invention.

For example, Sullivan '553 is directed to low spin rate golf balls with ionomeric covers. While additional materials, such as density-adjusting fillers, may be added to ionomeric cover compositions, there is no suggestion to include the presently recited oxa ester into the Sullivan '553 cover composition. Similarly, WO 96/40377 is directed to ionomeric golf ball covers that may include conventional fillers that are non-reactive with the ionomer component. See Page 19, lines 3-20. WO 96/40377, however, is completely silent as to the use of oxa ester in a layer blend as presently recited.

Therefore, Applicants respectfully submit that no combination of WO 96/40826 and Sullivan '553 or WO 96/40377 discloses or suggests the presently recited polymer blend. As such, Applicants respectfully request reconsideration and withdrawal of the § 103 rejection based on the combination.

The Rejection Based on WO 96/40826 in view of Sullivan '304

The Examiner also rejected claim 23 under § 103(a) as obvious over WO 96/40826 in combination with U.S. Patent No. 5,368,304 to Sullivan. The Examiner relied on Sullivan '304 for its disclosure of COR and compression values for commercial golf balls in light of the WO 96/40826 patent's lack of discussion regarding ball COR and compression. The Sullivan '304 patent, like the previously discussed cited references, however, does not disclose or suggest oxa ester / ionomer or oxa ester / saponified ionomer blends for golf ball layers, as now recited in the independent claims. Thus, the Sullivan '304 patent does not remedy the above-referenced deficiency of WO 96/40826 with respect to the pending claims. Applicants, therefore, respectfully request reconsideration and withdrawal of the rejection based thereon.

The Rejection Based on Sullivan '237 in view of WO 96/40826 or WO 98/43713

Claims 21-25, 28-41, and 43-44 were rejected under § 103(a) as obvious over U.S. Patent No. 6,368,237 to Sullivan in view of WO 96/40826 or WO 98/43713. This combination of references also does not render the presently claimed invention obvious for the reasons that follow.

The Sullivan '237 patent generally discloses three layer golf balls with an inner cover layer of a high acid ionomer and an outer cover of a soft ionomer or a non-ionomeric thermoplastic ionomer. *See Abstract.* Sullivan '237, however, is completely silent as to the inclusion of oxa esters in either the inner cover layer or outer cover layer blends.

In an attempt to remedy this deficiency, the Examiner has combined WO 96/40826 or WO 98/43713 with Sullivan '237 for their respective disclosures of oxa acid blends. As discussed above, however, the present invention now recites polymer blends of ionomers or saponified ionomers and oxa esters. Both WO 96/40826 and WO 98/43713 are completely silent as to the use of oxa esters in polymer blends.

Similar to the WO 96/40826 disclosure discussed previously, WO 98/43713 discloses oxa acids in blends with polyurethanes, epoxy resins, polyethylene, polyamide, polyesters, or ionomers, but is completely silent on the use of oxa esters in such blends. Therefore, no combination of Sullivan '237, WO 96/40826, or WO 98/43713 teaches the present invention.

And, because oxa esters and oxa acids are different in structure and performance in a blend, a skilled artisan would have had no motivation to replace the disclosed oxa acid with the presently recited oxa ester without the use of impermissible hindsight. Thus, Applicants respectfully submit that no combination of Sullivan '237, WO 96/40826, or WO 98/43713 anticipates or renders obvious the present invention. As such, Applicants respectfully request reconsideration and withdrawal of the rejection based thereon.

The Rejection Based Upon WO 96/40377 in view of WO 96/40826 or WO 98/43713

Finally, claims 21-26, 31-34, 37-41, and 43 were rejected under § 103(a) as obvious over WO 96/40377 in view of WO 96/40826 or WO 98/43713. For the reasons discussed above, none of these international publications disclose the presently recited oxa ester / ionomer or oxa ester / saponified ionomer blends. Instead, WO 96/40377 is directed to ionomeric golf ball covers that may include conventional fillers that are non-reactive with the ionomeric component and WO 96/40826 and WO 98/43713 disclose oxa acid blends with polyurethanes, epoxy resins, polyethylene, polyamide, polyesters, or ionomers. All three cited references are completely silent as to the use of oxa esters in blends.

Without even a suggestion to use oxa esters, Applicants respectfully submit that the cited references would not have motivated those of ordinary skill in the art to look to these three references, alone or in any combination. To do so would require the use of hindsight, which is, of course, impermissible.

Thus, the present invention is not disclosed or rendered obvious by any combination of WO 96/40377, WO 96/40826, and WO 98/43713. As such, Applicants respectfully request that the § 103 rejections based thereon be reconsidered and withdrawn.

DOUBLE PATENTING REJECTION

Claims 21-27, 30-34, and 36-43 were rejected under the judicially created doctrine of obviousness-type double patenting as being obvious over claims 1-58 of the parent '955 patent. Applicants respectfully disagree with the Examiner's statement on page 6 of the Office Action that a saponified polymer is not patentably distinct from a conventional ionomer. As explained in the present Specification, a "saponified polymer" or "saponified ionomer" refer to a polymer including at least one olefin and at least one unsaturated monomer that contains a pendant ester group, where at least some of the pendant ester groups have been hydrolyzed or saponified. See Specification at Page 11, lines 24-29. Saponified ionomers differ from conventional ionomers in that any pendant groups that are not modified by the saponification process are ester groups in contrast to the pendant carboxylic acid groups that remain after neutralization in conventional ionomers. *Id.*

To expedite prosecution, however, Applicants submitted a Terminal Disclaimer with the original Response filed on September 5, 2003 in compliance with 37 CFR 1.321(c). Thus, Applicants respectfully request reconsideration and withdrawal of the double patenting rejection.

CONCLUSION

All claims are believed to be in condition for allowance. If the Examiner believes that the present amendments still do not resolve all of the issues regarding patentability of the pending claims, Applicants invite the Examiner to contact the undersigned attorneys to discuss any remaining issues.

A Petition for Extension of Time, with the requisite fee, was submitted with the original Response filed on September 5, 2003. In addition, a Fee Sheet Transmittal was also submitted at that time to for the Terminal Disclaimer.

No fees are believed to be due at this time. Should any fee be required, however, please charge such fee to Swidler Berlin Shereff Friedman, LLP Deposit Account No. 195127, Order No. 20002.0236.

Respectfully submitted,
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